# **PULSAR DIGEX Manual**

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The point of impact shifts after firing rounds

After zeroing, the aiming reticle moves relative to the centre of the display

The riflescope will not focus

Smartphone or tablet cannot be connected to the riflescope

Wi-Fi signal is missing or interrupted

Poor image quality/ Reduced detection distance

There are several light or black dots (pixels) on riflescope's display or sensor

Remote control does not work

Legal compliances and disclaimers

# **Specifications**

Model	C50 (With IR-Illuminator X940S)
SKU	766351
Optical specifications	
Lens Focus, mm	F50 F/1.4
Magnification, x	3.5-14
Eye Relief, mm	50
Field of view (horizontal), °/m@100 m	6.7/11.7
Dioptre adjustment, D	-3/+5
Close-up range, m/y	5/5.47
Range of Detection at Night, (Deer Type Object), m/y	500/547
Electronic characteristics	
Sensor type/resolution	FHD CMOS/1928x1088
Display Type / Resolution	AMOLED/1024×768
Aiming reticle	
	11.5 mm – 3.5x
Click value, mm@100 m – when magnifying, x	5.75 mm – 7x
	2.875 mm – 14x
Click Range (H/V), mm@100m	2300
Operating features	
Tube Diameter (for mounting rings), mm	30

Model	C50 (With IR-Illuminator X940S)
Power Supply, V	3-4.2
Battery Type / Capacity / Rated Output Voltage	Li-Ion Battery Pack APS2 / 2000 mAh / DC 3.7 V (removable) or Li-Ion Battery Pack APS3 / 3200 mAh / DC 3.7 V (removable)*, Li-Ion Battery Pack APS5 / 4900 mAh / DC 3.7 V (built-in)
External Power Supply	5 V, 9 V (USB Type-C Power Delivery)
Max. Battery Operating Time (built-in APS5 and removable APS2) at t = 22 °C, h**	10
Maximum Recoil Power on Rifled Weapons, Joules	6000
Maximum Recoil Power on Smooth-Bore Weapons, Caliber	12
Degree of Protection, IP code (IEC60529)	IPX7
Operating Temperature, °C (°F)	-25 - +50 (-13 - +122)
Dimensions, mm / inch	408x101x88 / 16.06×3.98×3.46
Weight (without removable battery), kg / oz	1.26/44.45
Video recorder	
Video/Photo Resolution, Pixels	1024×768
Video Recording/Photo Format	.mp4 / .jpg
Built-In Memory	16 GB
Wi-fi channel***	
Frequency	2.4/5 GHz
Standard	IEEE 802.11 b/g/n/ac
Bluetooth	
Wireless Protocol	BLE 4.2
Detachable IR-Illuminator	

C50	(With	IR-Illuminator X940S)

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Type/Wavelength, nm

LED/940

- \* Purchased separately
- \*\* Actual operating time will depend to what extent the Wi-Fi and built-in video recorder is used.
- \*\*\* The reception range may vary depending on various factors: obstacles, other Wi-Fi networks.

### About the device

# **Description**

The **Digex C50** Digital riflescope is designed for round-the-clock use.

These riflescopes are designed for hunting, target shooting and recreational shooting, observation and orientation.

The riflescope supports day and night observation modes and colour and black and white images.

In deep twilight, when the human eye is already unable to discern details of observed objects, the **Digex C50** displays a bright image with correct colour rendering, prolonging hunting time into the night.

In night conditions (absence of starlight, moonlight), it is recommended to use an infrared illuminator with an 850 nm or 940 nm wavelength.

To get started, see the sections:

**Battery Charging** 

**Battery Installation** 

Mounting on the Rifle

Powering on and Image Setting

How to Zero

Stream Vision 2

**Ballistic Calculator** 

## Package contents

Digex C50

Digex C50

without IR Illuminator

with IR Illuminator Pulsar Digex-X850S/X940S

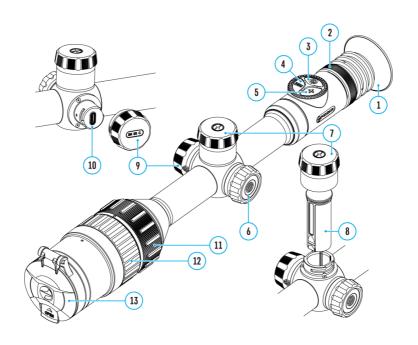
Digex C50 Digital Riflescope

APS2 rechargeable battery – 1 pcs.

APS2 rechargeable battery – 2 pcs.

APS battery charger	
Power adapter	
USB Type-C – Type-C cable with USB Type-A adapter	
Carrying case	
Lens-cleaning cloth	
Quick Start Guide	
Warranty card	
APS3 battery cover (for riflescope)	
Allen wrench	
30 mm ring with Weaver rail –	
– IR-illuminator	
– APS3 battery cover (for IR illuminator)	

# **Components and controls**



- 2. Eyepiece dioptre adjustment ring
- 3. ON/OFF button
- 4. REC button
- 5. ZOOM button
- 6. Controller
- 7. Battery compartment cover
- 8. Battery APS2
- 9. USB Type-C cover
- 10. USB Type-C port
- 11. Objective lens focus ring
- 12. Aperture adjustment ring
- 13. Lens cap

#### **Features**

- 24/7 use
- Full-colour imaging from sunset till dusk
- High contrast black and white image at night
- High contrast HD AMOLED colour display 1024×768
- Over 500 metre night viewing range
- Variable magnification from 3.5x to 14x
- SumLight™ program algorithm for additional sensitivity improvement
- High-strength aluminium alloy housing
- Heavy caliber shock resistance: 12-gauge, 9.3×64, .375H&H
- Mounting with standard 30mm rings
- Instant start
- Completely waterproof IPX7
- Customisable reticles
- Picture in Picture function
- Device firmware update using the free Stream Vision 2 App\*
- Storing photos and videos in Cloud when using the Stream Vision 2 App\*
- B-Pack mini combined power system

- Wide operating temperature range -25 °C +50°C (-13 °F- +122 °F)
- \* Not available for models without Wi-Fi

#### Useful functions and modes

- Stadiametric rangefinder (to estimate distance to object)
- Built-in 3-axis accelerometer gyroscope (slope angle indication)
- Smooth digital zoom
- Large selection of electronic reticles
- Scalable reticles (reticle graduation changes proportional to zoom)
- 5 zeroing profiles (10 distances per profile)
- One-shot zero function
- Precise "Zoom Zeroing" (reducing the minute of angle click value when zeroing at high magnification)
- "Freeze Zeroing" function
- Display Off function
- Wi-Fi. Remote control and observation with a smartphone\*
- Display dimming function
- Auto shutdown function
- Ballistic calculator
- Wireless Remote Control (purchased separately)

#### **Video Recording:**

- Built-in photo and video recorder with sound recording
- 16GB internal memory
- Integration with iOS and Android devices.

#### **Batteries:**

- Built-in 4900 mAh battery pack APS5
- Quick change Li-lon batteries APS2/APS3
- Built-in and external batteries APS2/APS3 can be charged via USB Type-C
- \* Not available for models without Wi-Fi

### **Power supply**

#### **Precautions**

- Only use the charger supplied with the Battery Pack. The use of any other charger may irreparably damage the Battery Pack or the charger and may cause fire.
- Do not charge the Battery Pack immediately after bringing it from a cold environment to a warm one. Wait for 30-40 minutes for the Battery Pack to get warm.
- It is not recommended to charge the batteries with a charger connected to the USB port of a computer or laptop. It can damage the computer.
- Do not leave the Battery Pack unattended while charging.
- Never use a modified or damaged charger.
- Do not leave the Battery Pack with a charger connected to the power adapter after charging is complete.
- Do not expose the Battery Pack to high temperatures or an open flame.
- Do not submerge the Battery Pack in water.
- Do not connect an external device with a current consumption that exceeds permitted levels.
- Do not dismantle or deform the Battery Pack.
- Do not drop or hit the Battery Pack.
- Keep the Battery Pack out of the reach of children.

# Recommendations for battery use

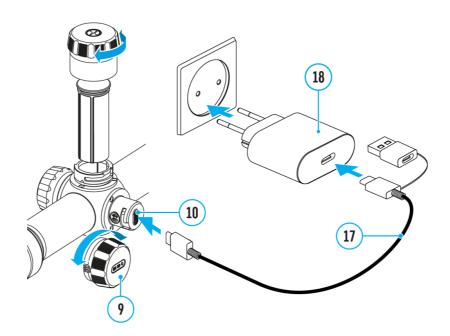
 During long-term storage, the Battery Pack should be partially charged – the charge level should be between 50% and 80%.

- Charge the Battery Pack at a temperature from 0° C to +45° C (32° F to +113° F), otherwise the battery life will decrease significantly.
- When using the Battery Pack at sub-zero (sub 32° F) temperatures the battery capacity decreases. This is normal and is not a defect.
- Do not use the Battery Pack at temperatures above those shown in the table this may decrease battery life.
- The Battery Pack is short circuit protected; however, any situation that may cause short-circuiting should be avoided.

## **Battery charging**

**Digex C50** digital riflescopes come with a built-in rechargeable lithium-ion Battery Pack APS5 and a removable rechargeable lithium-ion APS2 Battery Pack. The batteries should be charged before first use.

The icon in the status bar will flash when the battery is low. The batteries need to be charged.

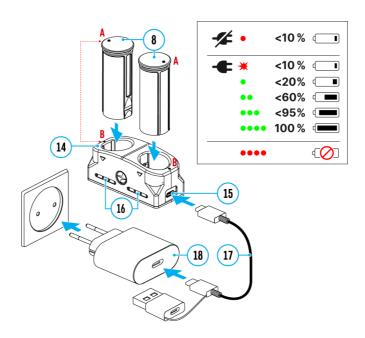


- 1. Open the USB Type-C cover (9) by turning it counterclockwise.
- 2. Connect the USB Type-C plug of the USB cable (17) to the USB Type-C port (10) in the body of the riflescope.
- 3. Connect the second USB plug of the USB cable (17) to the USB port on the power adapter (18) by removing the USB Type-A adapter.

- 4. Plug the device into a 100-240 V socket.
- 5. Wait until the batteries are fully charged (indication in the status bar: \_\_\_\_\_).

**Attention!** When charging rechargeable batteries with a USB Type-C connector (10) in the riflescope body section, charging priority is given to the built-in battery. When the device is off, both batteries are charged at the same time. When using the device, the external battery is discharged first.

The rechargeable lithium-ion APS2 and APS3\* Battery Packs may be recharged using the APS\*\* charger



- 1. Insert the Battery Pack (8) along the rail into the APS charger (14) slot as far as it will go. The APS charger is supplied with your device or purchased separately.
- 2. Point **A** on the battery and point **B** on the charger should match.
- 3. Two batteries\*\*\* can be charged at the same time: the second slot is designed for it.
- 4. Connect the USB Type-C plug of the USB cable (17) to the port (15) of the charger (14).
- 5. Connect the second plug of the USB cable (17) to the USB port on the power adapter (18).
- 6. Plug the device into a 100-240 V socket.
- 7. The LED indicator (16) will display battery charge status.
- 8. Wait until the battery is fully charged (LED indication (16): ••••).

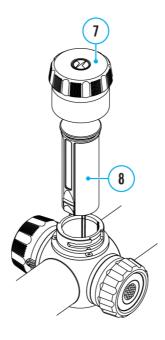
(16) LED Indicator***	Battery Charge Status	
•	Battery level is from 0% to 10%. Charger is not connected to a power supply.	
	Battery level is from 0% to 10%. Charger is connected to a power supply.	

••••	Defective battery. Do not use the battery.
•	Battery level is from 10% to 20%.
••	Battery level is from 20% to 60%.
•••	Battery level is from 60% to 95%.
••••	Battery completely charged. Charging will automatically stop. The battery can be disconnected from the charger.

- \* Purchased separately
- \*\* Included in the delivery package.
- \*\*\* Purchased separately for models without an IR illuminator.

\*\*\*\* LED indicator displays the current battery charge status for 30 seconds when the APS charger is not plugged in. When the power is being supplied, the indicator is constantly displaying the current battery charge status, the LEDs are additionally flickering to display the battery charging process.

## **Battery installation**



1. Turn the battery cover (7) counterclockwise and remove it.

- 2. Install the battery (8) into the battery compartment along the special guides in the device body designed for it.
- 3. When properly installed, the battery is fixed in the battery compartment of the device.
- 4. Close the battery cover (7) by turning it clockwise.

### Switching and changing the batteries

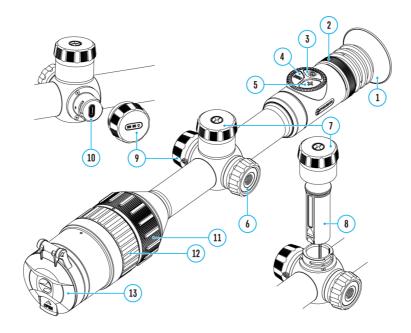
**Digex C50** riflescopes are powered by 2 batteries: built-in Battery Pack APS5 and removable Battery Pack APS3/APS2.



- 1. If there are two batteries in the device, two battery icons are displayed in the status bar (1 built-in battery, 2 removable battery). The device battery is displayed in grey and white; it is grey when inactive.
- 2. When there is no removable battery in the device, only one icon for the built-in battery displays in white in the status bar.
- 3. When both batteries are fully charged, the device is powered by the removable battery. If there is low removable battery level, the device will switch to the built-in battery.
- 4. Battery charge level is displayed in % above the icon in the status bar while charging.
- 5. It is possible to replace the removable battery even while the device is on.

**Attention!** When installing a removable battery with a sufficient charge level, the device will automatically switch to it.

### **External power supply**



Power can be supplied from an external source such as a 5 V or 9 V power bank.

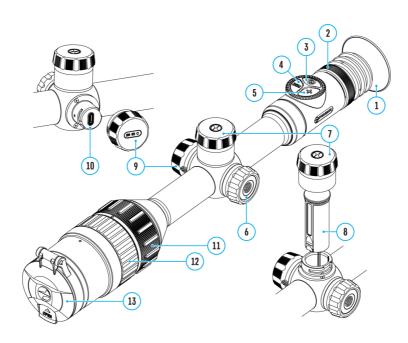
- 1. Connect the external power supply to the USB Type-C port (10) of the riflescope.
- 2. The riflescope switches to external power source, while built-in Battery Pack APS5 and removable Battery Pack APS2 (or APS3\*) will gradually recharge.
- 3. A rechargeable battery icon 100+1 indicating a percentage of the battery life will appear in the status bar.
- 4. When you turn off external power source, the riflescope switches over to the removable battery without turning off. When there is no removable battery or low power level the device switches to the built-in battery.

#### \*Optional

**Attention!** Charging Power Bank APS2 / APS3 / internal APS5 batteries at air temperatures below 0 °C can result in reduced battery life. When using external power, connect Power Bank to the switched-on riflescope, which have worked for several minutes.

## **Getting started**

## Mounting on the rifle

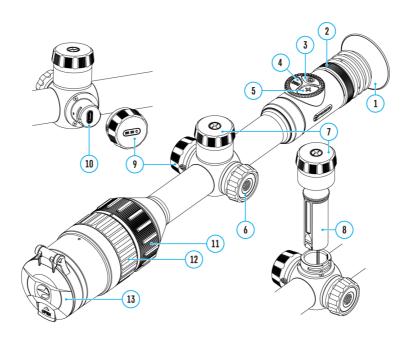


To ensure accurate shooting the **Digex C50** riflescope should be properly mounted on the rifle.

- The riflescope is fixed using the mount, which is purchased separately. Use only high-quality mounts and rings that are designed specifically for your rifle. Follow the mounting manufacturer's recommendations on the installation procedure and use the proper tool.
- When mounting the riflescope, adjust the position on the rifle so that proper (comfortable) holding of rifle ensures the distance between the riflescope and eye (eye relief) specified by the **Technical Specifications**. Failure to comply with this recommendation may result in injury to the shooter by the parts of the riflescope eyepiece when shooting.
- It is recommended to install the riflescope as low as possible, at the same time it should not be in contact with barrel or receiver.
- In order to avoid pinching the riflescope body, a tightening torque for the screws of the mounting rings must be not more than 2.5 Nm (22.1 Pound-force inches). A torque wrench is recommended to control the tightening torque.
- Before using the riflescope when hunting, follow instructions in the Zeroing section.
- Use of a removable eyecup is recommended (1) to eliminate backlight from the display.

• It is recommended to use an eyecup while using the riflescope to increase camouflage and avoid detection. Mounting the eyecup on the riflescope eyepiece is carried out using built-in magnets.

## Powering on image settings



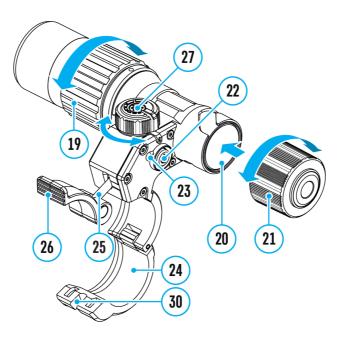
- 1. Open the lens cap (13).
- 2. Press the **ON/OFF (3)** button briefly to power the riflescope on.
- 3. Adjust the sharpness of the symbols on the display by rotating the dioptre adjustment ring of the eyepiece (2).
- 4. Turn the aperture adjustment ring (12) to select the observation mode (Day , Night ().
- 5. Select the image mode (colour/black-and-white) by short pressing the **ON/OFF (3)** button.
- 6. Rotate the lens focus ring (11) to focus on the object being observed.
- 7. Activate the quick menu by briefly pressing the controller button (6) to adjust the brightness and contrast of the display (see the Quick Menu Functions section for details).
- 8. Repeatedly press the **ZOOM (5)** button to change the magnification ratio of the riflescope. While the magnifying glass icon  $\bigoplus$  is visible on the screen, rotate the controller **(6)** for smooth digital zooming from the current magnification.
- 9. Turn on the IR illuminator\* and adjust the lighting power according to its operating instructions to improve the quality of observation in low light conditions.

- 10. Power the device off with a long press of the **ON/OFF (3)** button.
- \* Purchased separately for models without an IR illuminator.

### **IR Illuminator**

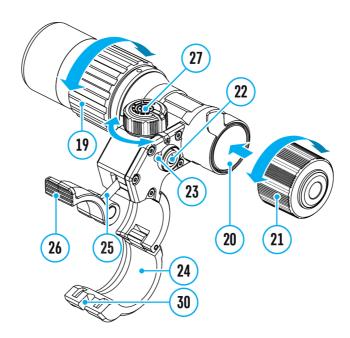
# Installing battery pack in the IR illuminator

The IR illuminator **Pulsar Digex S\*** is powered by an APS2 (or APS3\*\*) battery pack.



- 1. To install the battery in the IR illuminator, turn the battery cover **(21)** counterclockwise and remove it.
- 2. Install the battery into the battery compartment (20) using the special guides in the IR illuminator body designed for it.
- 3. When properly installed, the battery is fixed in the battery compartment (20).
- 4. Close the battery compartment cover (21), turning the cover clockwise.
- \* Purchased separately for models without an IR illuminator.
- \*\* Purchased separately.

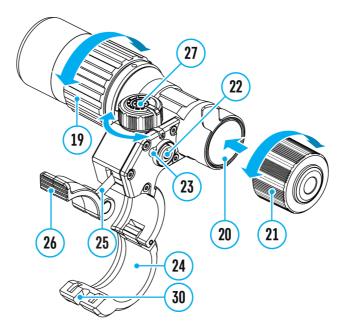
### Installing the IR illuminator on riflescope



- 1. Open the mount ring (24) of the IR illuminator.
- 2. Raise the eccentric lever **(26)** and put the mount on the riflescope body so that the mount half rings encircle the riflescope body.
- 3. Align the eccentric axis (25) with the groove (30) of the moving half ring.
- 4. Lock the eccentric lever (26) position by lowering it down.
- 5. The IR illuminator mount should be as close as possible to body of the riflescope lens.
- 6. In case of loosening or insufficient fixing of the IR-illuminator on the riflescope, raise the eccentric lever (26). Tighten the eccentric axis (25) 1-2 turns using the supplied Allen key. Then lower the lever and check the fixation of the IR-illuminator on the riflescope. If necessary, repeat the above steps until the required degree of fixation of the IR-illuminator is achieved.

### Powering on and adjusting the IR illuminator

Use the IR illuminator to improve the quality of observation in lowlight conditions at night.

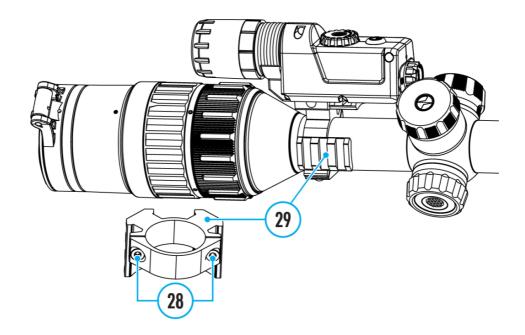


- 1. Turn on the IR illuminator by pressing the button (22) on the side of the light housing.
- 2. Turn the knob (27) of the IR illuminator to control the illuminator power.
- 3. To adjust the IR light position in the riflescopes field of view, loosen the ring (19) of the IR illuminator by turning it in the direction of the arrow.
- 4. Turn on the riflescope to control the position of the light spot on the display. Adjust the IR illuminator lens using its hinge system to align the IR illumination in the riflescopes field of view. Once adjusted, tighten the IR illuminator ring (19).
- 5. Press the IR button (22) to turn off the IR illuminator.

The illuminator is equipped with an LED indicator (23) making it possible to monitor the battery level. Indication modes are in the table below:

(23) Indicator Color	IR Operating Mode	
•	The IR illuminator is on. The battery is charged	
•	The IR illuminator is on. The battery is discharged.  Approximate operating time before the IR illuminator turns off is 30 minutes	
_	The IR illuminator is off	

# Installing the IR illuminator on the weaver rail



To install an IR illuminator with a Weaver mount\*, you will need to install a 30 mm ring with Weaver rail\*\* on the riflescope:

- 1. Unscrew the screws (28) with the Allen key.
- 2. Install the ring (29) on the riflescope body.
- 3. Adjust the position of the Weaver rail (left/top/right) depending on the seat of the IR illuminator.
- 4. Tighten the screws (28).
- 5. Install the IR illuminator on the Weaver rail according to the installation instructions.
- \* Purchased separately.
- \*\* Supplied with models without an IR illuminator.

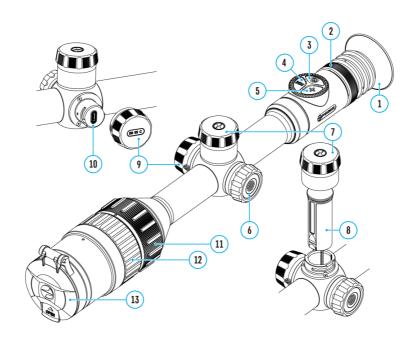
## **Button operation**

Operation	Button
Power riflescope on	short press
Power riflescope off	long press for 3 secs

Operation	Button
Turn display off	long press for less than 3 secs
Turn display on	<b>U</b> short press
Colour/Black & white mode switch	<b>b</b> short press
Disable SPOA of ballistic calculator	<b>(</b> double press
Changes magnification (zoom)	+ short press
Smooth Zooming	rotation
PiP on/off	long press
Video Recorder	Button
Start/pause/resume video recording	REC short press
Stop video recording	REC long press
Switch to video / photo mode	REC long press
Capture Photo	REC short press
Main Menu	Button
Enter main menu	long press
Navigation through menu	rotation
Enter menu items	short press
Confirm value	short press
Exit menu items	long press
Exit main menu	long press
Quick Menu	Button
Enter quick menu	short press
Switch between quick menu options	short press
Parameter change	rotation
Exit quick menu	long press

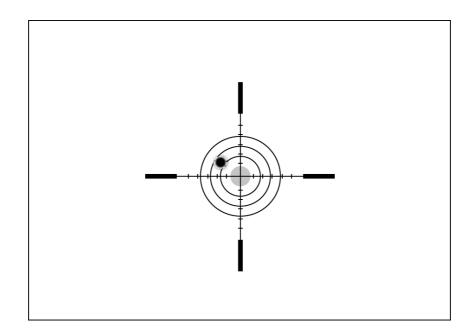
# **Zeroing**

### How to zero



Zeroing at a temperature close to the riflescope's operating temperature is recommended.

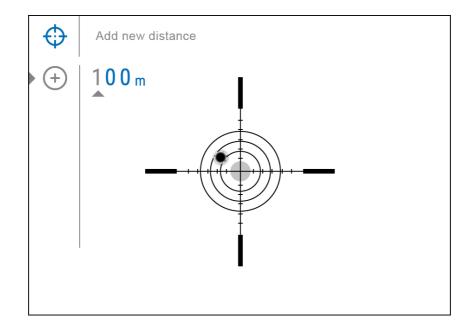
Step 1. Take a shot

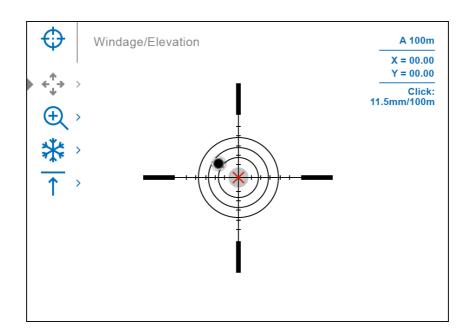


- **1.** Shooting from a benchrest is recommended.
- 2. Set a target at a known distance.
- **3.** Adjust the riflescope according to the **Powering on and Image Setting** section.
- **4.** Select the zeroing profile (see **Reticle & Zeroing** → **Zeroing Profile** main menu item)
- **5.** Point the rifle at the center of the target and shoot.

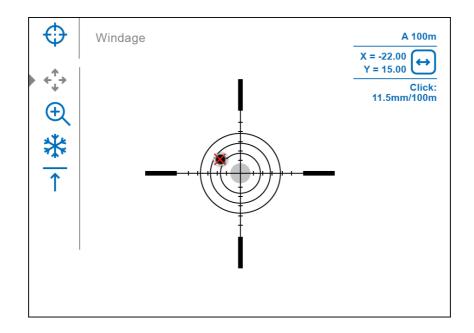
#### Step 2. Align the reticle with the point of impact

- 1. Press and hold the controller button (6) to enter the main menu.
- 2. Add the distance you are aiming at (e.g. 100 meters): Reticle & Zeroing → Add New Distance → . Select the value for each distance digit by rotating the controller ring (6). Press the controller button (6) briefly to switch between digits. After setting the required distance, press and hold the controller button (6) to save it.





- **4.** Press the controller button **(6)** briefly to enter the **Windage/Elevation** submenu.
- **5.** While holding the reticle at the aiming point, move the auxiliary cross  $\times$  until it is aligned with the impact point by rotating the controller ring **(6)**.



**6.** To change the direction of the auxiliary cross movement from horizontal to vertical, press the controller button **(6)** briefly.

#### **Zoom Zeroing function:**

To improve the accuracy of zeroing, you can change the magnification in the menu . The larger the magnification, the smaller the step of shifting the reticle on the display relative to the image from the sensor.

11.5 mm – 3.5x

Click value, mm@100 m – when magnifying, x

5.75 mm – 7x

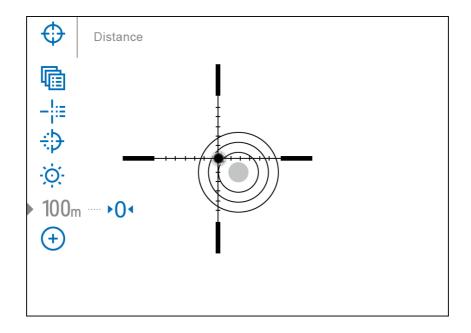
2.875 mm – 14x

#### One-shot "Freeze Zeroing" function:

Using the **Freeze** function allows you to make adjustments without the need to hold the rifle precisely at the initial aiming point – freezing the zeroing screen (refer to **Reticle & Zeroing** menu item  $\Rightarrow$  **Distance** submenu  $\Rightarrow$  **Zeroing Parameters Settings**  $-\frac{1}{1}$  submenu  $\Rightarrow$  **Freeze** submenu or short pressing of the **ON/OFF (3)** button. The image will "freeze" and the icon will appear.

#### Step 3. Save the coordinates

1. Press and hold the controller button (6) to save a new position for the reticle. The reticle will be aligned with the impact point and it will exit the **Windage/Elevation** submenu.

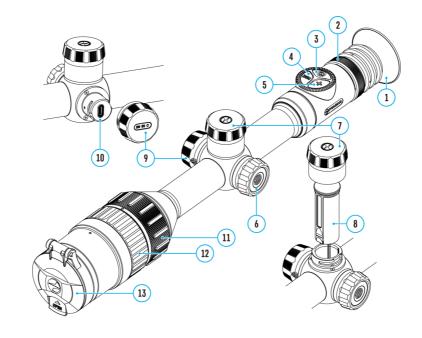


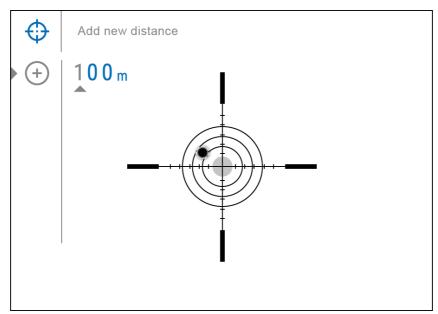
- **2.** Press and hold the controller button **(6)** again to exit the zeroing settings menu the message "Zeroing coordinates saved" appears, confirming the successful operation.
- **3.** Fire a second shot now the point of impact and the aiming point must be matched.

#### Notes:

- After zeroing, the reticle may not be in the center of the display.
- The range of movement of the riflescope reticle allows you to successfully zero the riflescope, even on mounts that are far from ideal, minimizing the possible disadvantages of the mounts. The better the mount is installed, the less you have to move the reticle. We recommend mounting the riflescope as low as possible.

### Add new distance





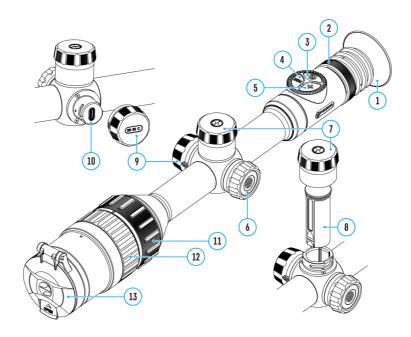
To zero your riflescope, you need to set a zeroing distance first in the range of 1 to 910 m (955 yards).

- 1. Press and hold the controller button (6) to enter the main menu.
- 3. Press the controller button (6) briefly to enter the Reticle & Zeroing submenu.
- 4. Rotate the controller ring (6) to select Add New Distance (+) menu item.
- 5. Press the controller button (6) briefly to enter the submenu.
- 6. Rotate the controller ring (6) to select a value for each digit. Press the controller button (6) briefly to switch between digits ⊕ 150 m
- 7. Having set the desired distance, press and hold the controller button (6) to save it.

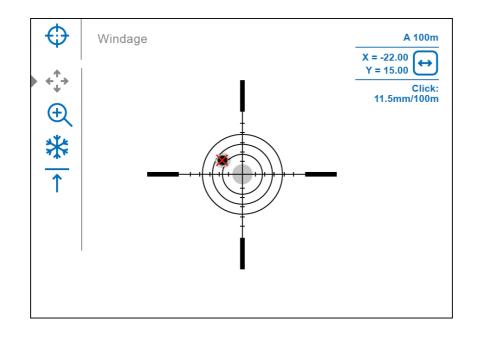
The distance you set first becomes a **primary distance** – shown with the  $\mathbf{0}$  icon on the right of the distance value.

Note: Maximum number of zeroing distances is 10 for each profile.

## Zeroing parameters settings



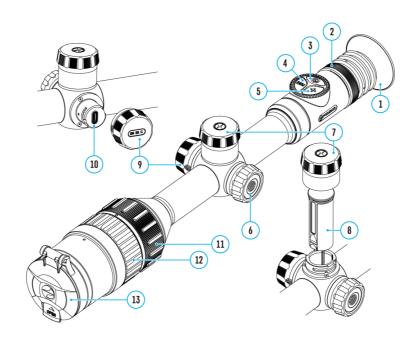
- 1. Press and hold the controller button (6) to enter the main menu.
- 2. Rotate the controller ring **(6)** to select **Reticle & Zeroing** in the menu. Briefly press the controller button **(6)** to select it. Zeroed distances are displayed below.
- 3. The values (e.g., +7.0) shown on the right of the distance values, stand for the number of clicks along the Y axis, at which the reticle position at other distances differs from the reticle position in the primary distance.
- 4. To zero at any distance again, rotate the controller ring **(6)** to select the required distance and briefly press the controller button **(6)**.
- 5. Rotate the controller ring (6) to select the **Zeroing Parameters Settings** and enter by briefly pressing the controller button (6).
- 6. **Zeroing** screen, which allows the change of zeroing coordinates, will appear:



# Windage/elevation

Adjust the reticle position through the **Windage/Elevation** submenu in **Zeroing** Parameters Settings  $-\frac{1}{1}$ . For more information, see the **How to Zero** section.

# Magnification (When zeroing)

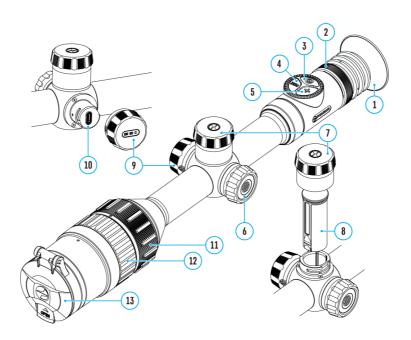


Magnification allows you to magnify via the device's digital zoom when zeroing, which reduces the MOA-per-click values of adjustments and improves zeroing accuracy.

- 1. In the **Zeroing Parameters Settings**  $-\frac{1}{1}$  menu, rotate the controller ring **(6)** to select the **Magnification**  $\bigoplus$  submenu item and enter by briefly pressing the controller button **(6)**.
- 2. Rotate the controller ring **(6)** to select a digital magnification value of the riflescope (e.g., x4).
- 3. Press the controller button (6) briefly to confirm your selection.

The minute of angle click when using the Magnification function is indicated in the Table of **Technical Specifications**.

#### **Freeze**

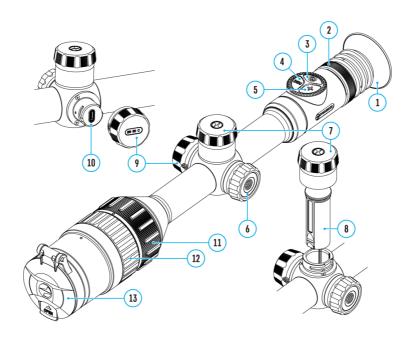


The "freeze" function allows the user to adjust the reticle on a still image while manipulating the rifle.

- 1. In the Zeroing Parameters Settings - menu, rotate the controller ring (6) to move the cursor to the Freeze function.
- 2. Align the reticle with the point of aiming and press the controller (6) or ON/OFF (3) button. A screenshot will be taken, an icon \*\* will appear.
- 3. Go to the additional **Windage/Elevation** submenu and adjust the position of the reticle (see the **How to Zero** section).

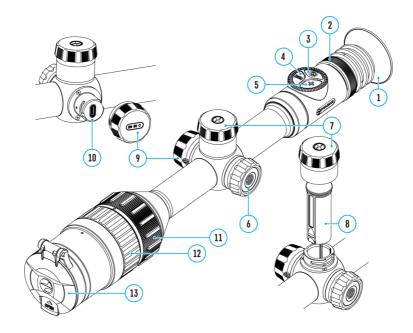
4. Select the **Freeze** submenu item again and briefly press the controller (6) or **ON/OFF** (3) button – the image will "unfreeze".

### Name distance



- 1. In the **Zeroing Parameters Settings** i- menu, rotate the controller ring **(6)** to select the **Name Distance** submenu item and enter it by briefly pressing the controller button **(6)**.
- 2. Rotate the controller ring **(6)** to select a value for each digit. Press the controller button **(6)** briefly to switch between digits.
- 3. Press and hold the controller button (6) to confirm the selection.

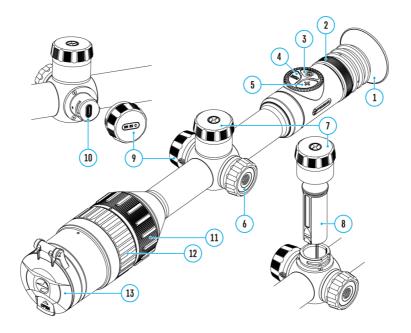
# Change primary distance



- 1. Press and hold the controller button (6) to enter the main menu.
- 2. Rotate the controller ring **(6)** to select the **Reticle & Zeroing** menu item and enter by briefly pressing the controller button **(6)** zeroed distances are displayed at the bottom.
- 3. Select a non-primary distance and enter the submenu for operating the distance with a brief press of the controller button (6).
- 4. Select **Change Primary Distance** ▶**0** item.
- 5. Press the controller button (6) briefly.
- 6. Icon ▶0 next to the selected distance confirms the change of primary distance.

There will also be a recalculation of corrections in clicks for other distances relative to the new primary distance.

### **Delete distance**



- 1. Press and hold the controller button (6) to enter the main menu.
- 2. Rotate the controller ring **(6)** to select the **Reticle & Zeroing** menu item and enter by briefly pressing the controller button **(6)** zeroed distances are displayed at the bottom.
- 3. Select the distance you wish to delete and enter the submenu for operating the distances with a brief press of the controller button (6).
- 4. Select **Delete Distance** item.
- 5. Press the controller button (6) briefly.
- 6. Select "Yes" in the appeared dialog box to delete a distance. "No" to cancel deletion.
- 7. Press the controller button (6) briefly to confirm your selection.

**Attention!** If the primary distance is deleted, the first distance on the list automatically becomes the new primary distance.

### Interface

#### Status bar

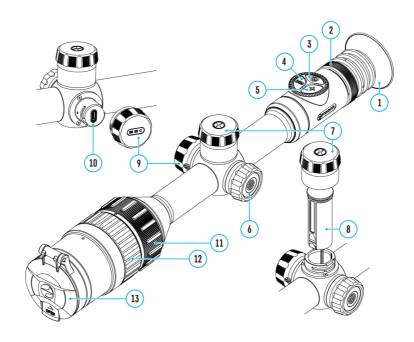
The status bar is at the bottom of the display and shows information on the actual operating status of the riflescope, including:



- 1. Actual zeroing profile (e.g., A)
- 2. Zeroing distance (e.g., 100 m)
- 3. SumLight<sup>™</sup> (on/off)
- 4. Mode of operation (colour, black and white)
- **5.** Microphone (on or off)
- 6. Current magnification
- 7. Wi-Fi connection
- 8. Bluetooth:
  - Bluetooth is on
  - the device with Bluetooth is connected
- 9. Auto Shutdown function (e.g., 5 minutes)
- 10. Clock
- 11. Power supply:
  - Battery discharge level (when riflescope is powered by a built-in or removable battery).
  - External battery power indicator 100 (if the riflescope is powered by an external power supply).

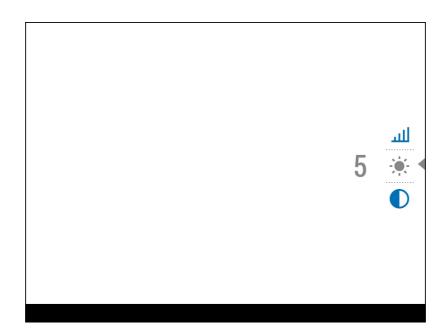
- Battery indicator 1004 with current percentage of charge (when charging from an external power source).
- Battery indicator shows a low battery charge
- Battery indicator shows a low internal battery charge

## Quick menu functions



The basic settings (adjusting brightness and contrast, smooth digital zoom function, stadiametric rangefinder, current profile and distance information) can be changed using the quick menu.

- Press the controller button (6) briefly to enter the quick menu.
- A short press of the controller button (6) enables you to switch between functions, as described below.



**Brightness** – rotate the controller ring **(6)** to change the display brightness value from 00 to 20.

**Contrast** - rotate the controller ring **(6)** to change the image contrast value from 00 to 20.

**A100** ↑ – information on the current profile and zeroing distance in this profile (e.g., profile A, zeroing distance of 100 m). This information is always displayed in the status bar. Rotate the controller ring **(6)** to switch between the zeroing distances in the adjusted profile. This function is available if there are two or more distances in the profile.

*Tip:* To quickly switch between distances while hunting, leave the Zeroing Distance option selected before exiting the quick menu. The menu item will be saved, and the next time you enter the quick menu, you can quickly switch the zeroing distances by turning the controller **(6)** (for example, 100 m, 150 m, 200 m).

- change the distance to calculate corrections for the ballistic calculator. Rotate the controller ring (6) to select the distance.

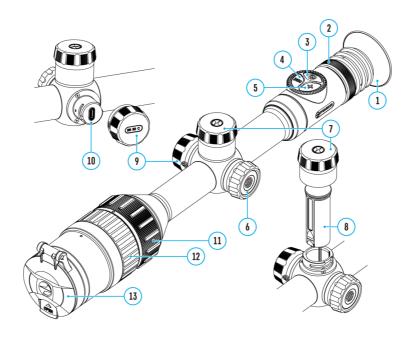
This function is only visible when the ballistic profile is selected.

Stadiametric Rangefinder — rotating the controller ring (6), change the distance between the special mark points to determine the distance to the observed object (for more details on the rangefinder, see the Stadiametric Rangefinder section).

 Press and hold the controller button (6) to exit the menu or wait 10 seconds to exit automatically.

### Main menu

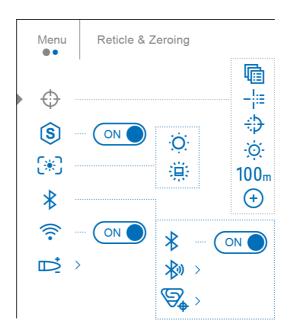
## Enter the main menu



- 1. Enter the main menu with a long press of the controller button (6).
- 2. To move through the main menu items, rotate the controller ring (6).
- 3. Press the controller button (6) briefly to open subitems of the main menu.
- 4. Press and hold the controller button (6) to exit from a subitem of the main menu.
- 5. Automatic exit from the main menu occurs after 10 seconds of inactivity.

*Note:* When entering the main menu, the background image darkens to enhance the menu visibility. This is normal and not a defect.

### General View of the Menu Tab 1

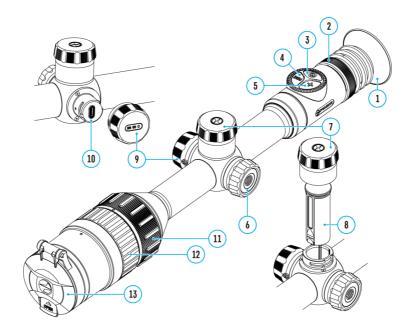


Tab 2



# **Reticle & Zeroing**

# **Zeroing Profile**



This item of the main menu allows you to select one of five profiles (A, B, C, D, E, F, G, H, I, J) to use. Each profile stores information on the following parameters:

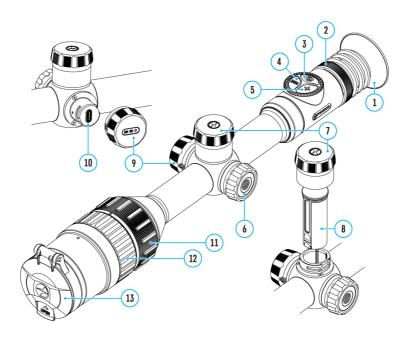
- A set of zeroed distances
- Reticle color
- Reticle type
- Ballistic profile on/off

Different profiles can be used when using the riflescope on different rifles or when shooting with different bullets.

Zeroing profiles cannot be deleted. You can change the parameters of zeroing distances or delete distances within a profile. You can also change the name of the zeroing profile in the Stream Vision Ballistics App.

- 1. Press and hold the controller button (6) to enter the main menu.
- 3. Press the controller button (6) briefly to enter the Reticle & Zeroing submenu.
- 4. Press the controller button (6) briefly to enter the Zeroing Profile submenu
- 5. Rotate the controller ring **(6)** to select one of the zeroing profiles (marked with the letters A, B, C, D, E, F, G, H, I, J).
- 6. Confirm your selection with a short press of the controller button (6).
- 7. The name of the selected profile appears in the status bar at the bottom of the display.

## Reticle Type

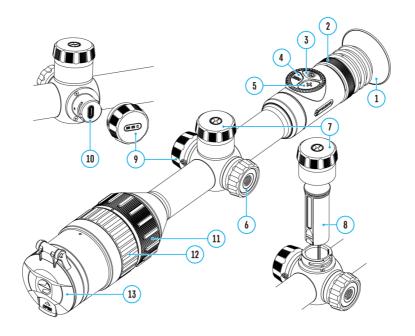


Selection of the aiming reticle shape.

- 1. Press and hold the controller button (6) to enter the main menu.
- 3. Press the controller button (6) briefly to enter the Reticle & Zeroing submenu.
- 4. Rotate the controller ring (6) to select the Reticle Type is submenu.
- 5. Press the controller button (6) briefly to enter the Reticle Type submenu.
- 6. Rotate the controller ring (6) to select the desired aiming reticle shape from the list that appears. The reticle type changes as the cursor goes down the reticle list.
- 7. Press the controller button **(6)** briefly to confirm the selection.

Note: the riflescope supports scalable reticles.

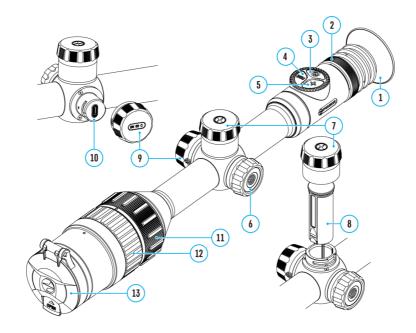
### **Reticle Colour**



#### Selection of reticle color.

- 1. Press and hold the controller button (6) to enter the main menu.
- 2. Rotate the controller ring (6) to select the Reticle & Zeroing  $\ \ \ \ \$  menu item.
- 3. Press the controller button (6) briefly to enter the Reticle & Zeroing submenu.
- 4. Rotate the controller ring (6) to select the Reticle Color : submenu.
- 5. Press the controller button (6) briefly to enter the Reticle Color submenu.
- 6. Rotate the controller ring **(6)** to select one of the color options for the reticle: Black/Red, White/Red, Black/Green, White/Green, Red, Green, Yellow, Blue, Orange, Black/White, White/Black.
- 7. Press the controller button (6) briefly to confirm the selection.

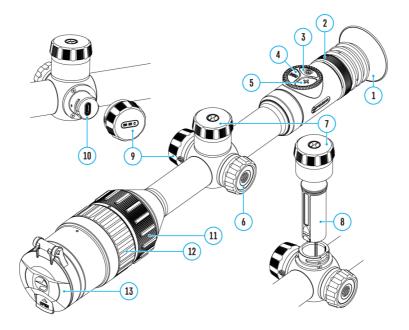
# **Reticle Brightness**



Adjust the brightness level of the aiming reticle.

- 1. Press and hold the controller button (6) to enter the main menu.
- 3. Press the controller button (6) briefly to enter the Reticle & Zeroing submenu.
- 4. Rotate the controller ring (6) to select the Reticle Brightness : Submenu.
- 5. Press the controller button (6) briefly to enter the Reticle Brightness submenu.
- 6. Rotate the controller ring (6) to set the desired brightness level (1 to 10).
- 7. Press the controller button (6) briefly to confirm the selection.

# Sumlight™



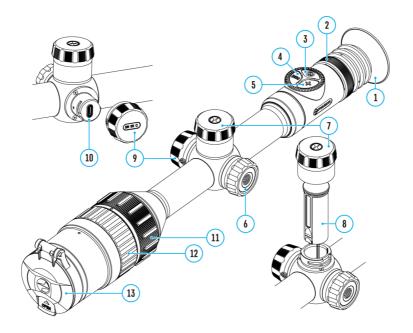
The SumLight™ function increases the sensor sensitivity. Available in the "Night" observation mode.

- 1. Turn off the IR illuminator before using the SumLight <sup>™</sup> function.
- 2. Press and hold the controller button (6) to enter the main menu.
- 3. Rotate the controller ring (6) to select the SumLight™
- 4. To turn SumLight™ on or off, briefly press the controller button (6).
- 5. SumLight $^{\text{\tiny M}}$  icon (on  $\mathbf{S}$  or off  $\mathbf{X}$  ) is shown in the status bar.

**Attention!** When the SumLight™ function is activated, the noise level in the image increases, the frame rate decreases and the image slows down. Any sharp movement of the device may cause the image to become "blurred". Such effects are not defects. Luminous white dots (pixels) may be visible on the device's display. The number of dots may increase when the **SumLight™** function is enabled. This is due to the nature of how this function works and is not a defect.

**Attention!** Due to peculiarities of AMOLED display technology, after switching between various reticles, you may notice on the riflescope's display semitransparent white lines of the previous reticle. They may appear if a new reticle does not contain elements (such as lines, circles, bars etc.) of the previous reticle. After a while, the "ghost image" becomes less noticeable. The appearance of "ghost images" on the display after repeatedly changing the reticle is not a defect and is not considered as a warranty case.

## Display settings



- 1. Press and hold the controller button (6) to enter the main menu.
- 2. Rotate the controller ring (6) to select the **Display Settings** menu item.
- 3. Press the controller button (6) briefly to enter the submenu.

### **Display dimming**

The dimming function : is designed to reduce the brightness of the display when using the device in the dark to reduce eye strain.

The Overlay Brightness value in dimming mode will be retained when the function is turned on again.

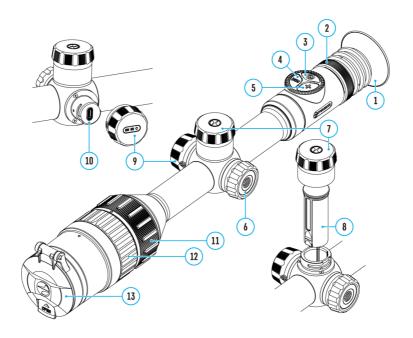
• Press controller ring (6) to select *On* for turning on the function or *Off* for turning it off.

### **Overlay Brightness**

Adjust the brightness level of the icons and screensavers (Pulsar, Display off) on the display.

- 1. Press and hold the controller button (6) to enter the main menu.
- 2. Rotate the controller ring (6) to select the Overlay Brightness : menu item.
- 3. Press the controller button (6) briefly to enter the Overlay Brightness submenu.
- 4. Rotate the controller ring (6) to set the desired brightness level (1 to 10).
- 5. Press the controller button (6) briefly to confirm the selection.

### **Bluetooth**



#### **Bluetooth Activation**

Turn on/off Bluetooth

- 1. Press and hold the controller button (6) to enter the main menu.
- 2. Rotate the controller ring (6) to select the Bluetooth Activation \* menu item.
- **3.** A short press of the controller button **(6)** opens the submenu.
- 4. Turn Bluetooth on/off with a short press of the controller button (6).
- **5.** Press and hold down the controller button **(6)** to exit the submenu.

### **Bluetooth Pairing with Wireless Remote Control**

The process of connecting the wireless remote control is described in the **Remote Control Activation** section.

### **Bluetooth Pairing with Stream Vision Ballistics App**

1. Turn on the Bluetooth module.



2. In the **Bluetooth** section of the menu, use the controller ring **(6)** to select the **Bluetooth pairing** menu item.

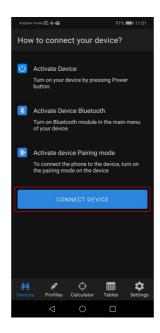


**3.** Confirm your selection with a short press of the controller button **(6)**.

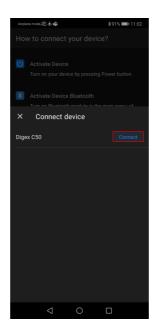


**4.** Turn on Bluetooth on your smartphone.

**5.** Connect your smartphone to the riflescope using the **Stream Vision Ballistics** App (Devices tab  $\rightarrow$  Connect Device button).



6. Click "Connect" next to your device.



**7.** Enter the code from the riflescope screen in the Stream Vision Ballistics App and tap "Connect".

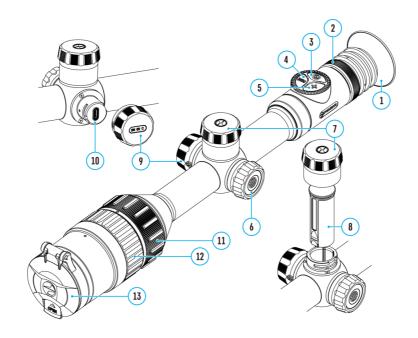




**8.** The blue Bluetooth icon next to the riflescope means that the riflescope is connected.



# Wi-fi activation

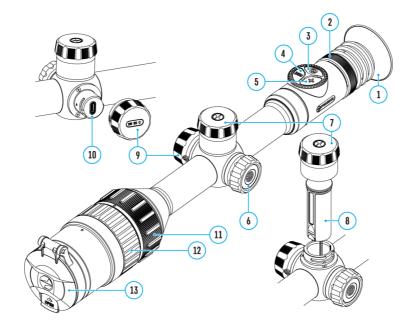


\* Not available for models without Wi-Fi

### Turn on/off Wi-Fi

- 1. Press and hold the controller button (6) to enter the main menu.
- 2. Rotate the controller ring (6) to select the Wi-Fi Activation from menu item.
- 3. To turn Wi-Fi on, briefly press the controller button (6). On
- 4. To turn Wi-Fi off, briefly press the controller button (6). Off O

## **Ballistics**

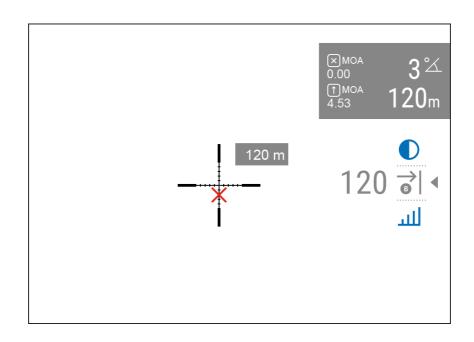


This section contains parameters for the ballistic calculator in the riflescope.

- 1. Enter the main menu with a long press of the controller button (6).
- 2. Rotate the controller ring (6) to select the submenu Ballistics .
- 3. Enter the submenu with a short press of the controller button (6).
- 4. Rotate the controller ring (6) to select the desired menu item.

#### **Ballistics Activation**

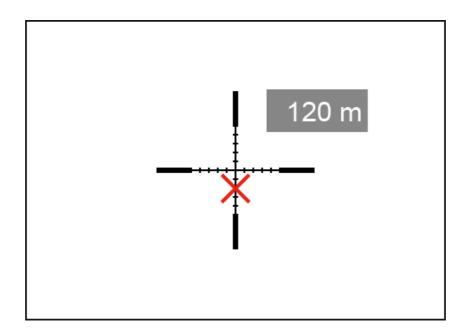
The Ballistic calculator function shows the recommended aiming point and correction values. For more information on using the function, see the section Ballistic Calculator.



- 2. Turn the Ballistic Calculator on/off with a short press of the controller button (6).

#### **Auxiliary Indication of Distance**

The "Auxiliary indication of distance" function shows an additional window with the result of measuring the distance near the reticles of the rangefinder or ballistic calculator.



- 1. Rotate the controller ring (6) to select Auxiliary indication of distance + \( \bar{\pi} \) .
- 2. Press briefly the controller button (6) to enter submenu.
- 3. Rotate the controller ring **(6)** to select the display mode: Off, Bound to reticle mark or Bound to SPOA mark.
- 4. Confirm selection with a brief press of the controller button (6).

### SPOA Mark Type

- 1. Rotate the controller ring (6) to select the SPOA Mark Type + menu item.
- 2. Press briefly the controller button (6) to enter submenu.
- 3. Rotate the controller ring **(6)** to select one of the three reticle shapes for the suggested point of aiming  $\begin{bmatrix} \times \\ \pm \end{bmatrix}$ .
- 4. Confirm selection with a brief press of the controller button (6).
- 5. The selected reticle will appear on the display when using the **Ballistic Calculator**.

#### Notes:

• MilLine is a line with 1 mil grooves. It scales as the magnification changes. It is designed for shooting with aiming off for adjustment depending on wind direction: the entire line moves vertically. As for the horizontal direction, you can navigate by grooves. If the weather correction function is turned on, the cross on the line will also move to the side.

#### **SPOA Mark Color**

1. Rotate the controller ring (6) to select the SPOA Mark Color + menu item.

- 2. Press briefly the controller button (6) to enter submenu.
- 3. Rotate the controller ring **(6)** to select one of color combinations for the suggested point of aiming.
- 4. Confirm selection with a brief press of the controller button (6).

#### **Ballistic Calculator Units**

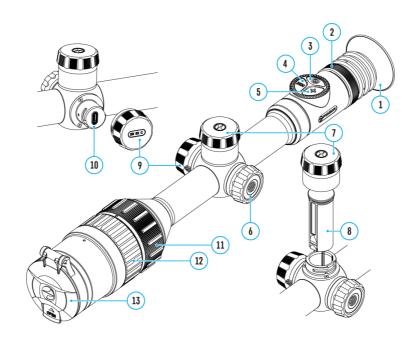
In this item, you can change or disable the units for the ballistic calculator corrections.

- 1. Rotate the controller ring (6) to select the Ballistic Calculator Units

menu item.

- 2. Briefly press the controller button (6) to enter the submenu.
- 3. Rotate the controller ring **(6)** to select one of the three units (MOA, MRAD, Click) or Off to disable the units.
- 4. Confirm your selection with a brief press of the controller button (6).

# Wi-fi settings



\* Not available for models without Wi-Fi

This item enables you to set up your riflescope for operation in a Wi-Fi network.

- 1. Press and hold the controller button (6) to enter the main menu.
- 2. Rotate the controller ring (6) to select the Wi-Fi Settings submenu.
- 3. Press the controller button (6) briefly to enter the submenu

4. Rotate the controller ring **(6)** to select the desired menu item.

#### **Password Setup**

This item enables you to set a password to access the riflescope from an external device. The password is used to connect an external device (i.e. smartphone) to the riflescope.

- 1. Press the controller button (6) to enter the Password Setup PAS submenu.
- 2. The unique password only for your device will appear on the image.
- 3. Rotate the controller ring **(6)** to set the desired password. Press the controller button **(6)** to toggle through the digits.
- 4. Press and hold the controller button **(6)** to save the password and exit from the submenu.

#### **Access Level Setup**

This sub-function enables you to configure the appropriate level of access to your device made available to the Stream Vision 2 application.

Owner level. A Stream Vision 2 user has full access to all the device's functions.

**Guest level**. A Stream Vision 2 user can only view video footage from the device in real time.

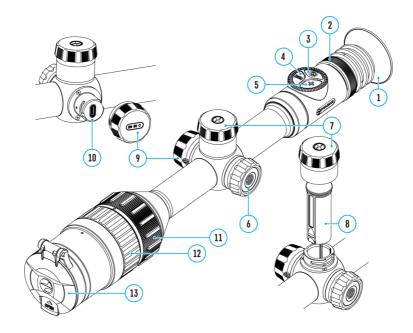
- 1. Press the controller button (6) to enter the Access Level Setup 8 submenu.
- 2. Rotate the controller ring (6) to select Owner or Guest.
- 3. Confirm your selection with a short press of the controller button (6).

#### Wi-Fi Band

This setting helps to solve smartphone connection issues in the following cases:

- If your smartphone does not support 5 GHz Wi-Fi band, switch to 2.4 GHz.
- Many Wi-Fi networks cause interference. In this case, switching between Wi-Fi bands can improve the connection between the device and the smartphone.
- 1. Press the controller button (6) to enter the Wi-Fi Band of submenu.
- 2. Rotate the controller ring (6) to select the WiFi bandwidth 5 GHz or 2.4 GHz.
- 3. Confirm your selection with a short press of the controller button (6).

## Microphone

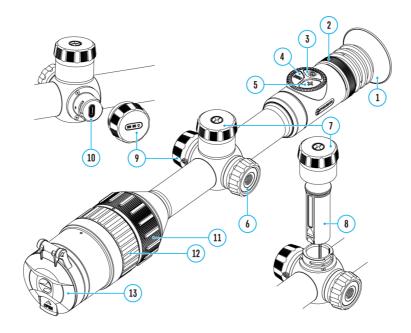


Turning on/off Microphone.

This item allows you to enable (or disable) the microphone for recording sound during video recording.

- 1. Press and hold the controller button (6) to enter the main menu.
- 2. Rotate the controller ring (6) to select the **Microphone** menu item.
- 3. To turn on the microphone, briefly press the controller button (6).
- 4. To turn off the microphone, briefly press the controller button (6).

# **General settings**



- 1. Press and hold the controller button (6) to enter the main menu.
- 2. Rotate the controller ring (6) to select the General settings menu item.
- 3. Press the controller button (6) briefly to enter the submenu.
- 4. Rotate the controller ring (6) to select the desired menu item.

This menu item allows you to configure the following settings:

### Language

Language selection:

- 1. Press the controller button (6) briefly to enter the Language submenu.
- 2. Rotate the controller ring **(6)** to select one of the available interface languages: English, German, Spanish, French, Russian, Italian, Portuguese, Dutch, Danish, Norwegian, Swedish, Polish, Czech, Hungarian, Bulgarian, Finnish, Lithuanian, Latvian, Ukrainian.
- 3. Confirm your selection with a short press of the controller button (6).
- 4. Press and hold the controller button **(6)** to save your selection and exit from the submenu.

#### **Date**

Date Setting:

- 1. Press the controller button (6) briefly to enter the **Date** submenu. The date is displayed in dd/mm/yyyy format.
- 2. Rotate the controller ring **(6)** to select the desired year, month and date. Press the controller button **(6)** briefly to switch between digits.
- 3. Press and hold the controller button (6) to save your selected date and exit from the submenu.

#### Time

Time Setting:

- 1. Press the controller button (6) briefly to enter the **Time** (1)
- 2. Rotate the controller ring (6) to select the time format 24 or AM/PM.
- 3. Press the controller button (6) to proceed to the hour setting.
- 4. Rotate the controller ring (6) to select the hour value.
- 5. Press the controller button (6) to proceed to the minute setting.
- 6. Rotate the controller ring **(6)** to select the minutes value.
- 7. Press and hold the controller button (6) to save your selected time and exit from the submenu.

#### Units of Measure

Units of measurement selection:

- 1. Press the controller button (6) briefly to enter the Units of Measure
- 2. Rotate the controller ring (6) to select the unit of measurement meters or yards, press the controller button (6).
- 3. Return to submenu will happen automatically.

#### **Auto Shutdown Options**

- 1. Rotate the controller ring (6) to select Auto Shutdown Options (1)
- 2. Press the controller button (6) to enter the submenu.

#### If device inactive for 30 min

When this feature is enabled, the device automatically turns off after 30 minutes of inactivity **Display off** mode.

- 1. Rotate the controller ring (6) to select If device inactive for 30 min (3):
- 2. Press controller ring **(6)** to select *On* for turning on the function or *Off* for turning it off.

#### If in idle position

- 1. Rotate the controller ring (6) to select If in idle position
- 2. Press the controller button (6) to enter the submenu.
- 3. Rotate the controller ring (6) to select the time period (1 min, 3 min, 5 min) upon expiry of which the riflescope will automatically shut down, or select Switch off if you wish to deactivate Auto Shutdown.
- 4. Confirm your selection with a short press of the controller button (6).

Note: If the automatic shutdown function is activated, the status bar shows an icon and shutdown time period as (1) 1/3/5 min.

#### Side Incline

This item allows you to activate or deactivate the "sector" arrows on the sides of the display. These arrows show the direction in which your rifle scope should be rotated to eliminate incline.



There are three modes of incline:

- 5°-10° one sector arrow;
- 10°-20° two sector arrow;
- > 20° three sector arrow.

A side incline of less than 5° is not displayed.

- 1. Rotate the controller ring (6) to select Side Incline → ← .
- 2. Press controller ring **(6)** to select *On* for turning on the incline indication or *Off* for turning it off.

#### **Default Settings**

- 1. Press the controller button (6) briefly to enter the **Default Settings** submenu.
- 2. Rotate the controller ring **(6)** to select "Yes" to restore default settings or "No" to cancel the action.
- 3. Confirm your selection with a short press of the controller button (6).
- If "Yes" is selected, display will show "Do you want to restore default settings?" with "Yes" and "No" dialogue options. Select "Yes" to restore default settings.
- If "No" option is selected: the action will be aborted and you will return to the submenu.

#### The following settings will be returned to their defaults:

- Image Mode Colour
- Video Recorder Mode Video
- Interface language English
- Wi-Fi Off (unique password)
- Magnification initial value
- PiP Off
- Unit of Measurement Metric
- Side Incline On
- Zeroing Profile A
- Reticle selection from the riflescope's memory 1
- Wi-Fi Band 2.4 GHz
- Ballistic calculator On
- Ballistic calculator units MOA
- Display dimming Off
- Auto shutdown if device inactive for 30 min On

**Attention!** After restoring default settings, the date, time and user pixel map as well as the zeroing profiles data entered by the user are saved.

#### **Format**

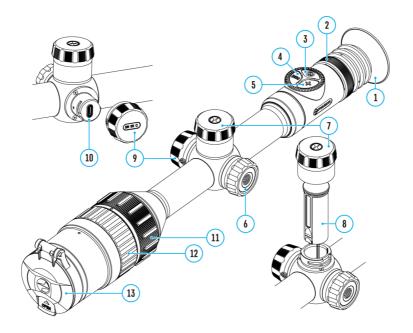
This menu option allows you to format the device's memory card. All files will be deleted.

Formatting should be carried out in case of a memory card error.

Before formatting, make sure you transfer all footage to other media.

- 1. Press the controller button (6) briefly to enter the Format submenu.
- 2. Rotate the controller ring **(6)** to select "Yes" to format the memory card, or "No" to return to the submenu.
- 3. Confirm your selection by pressing the controller button (6).
- If the "Yes" option has been selected, the "Do you want to format memory?" message with "Yes" and "No" dialogue options will appear on the display. Select "Yes" to format the memory card.
- If "No" option is selected: formatting is cancelled and return to the submenu.

## **Device information**



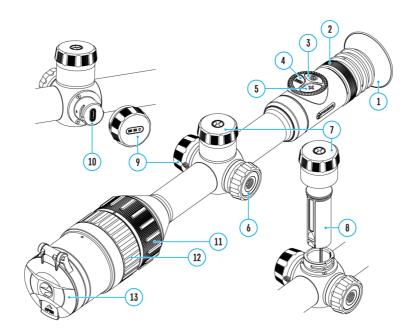
- 1. Press and hold the controller button (6) to enter the main menu.
- 2. Rotate the controller ring (6) to select the **Device Information** imenu item.
- 3. Press the controller button (6) briefly to enter the Device Information submenu.

This item allows the user to view the following information about the riflescope:

- Full name of the riflescope
- SKU number
- Serial number of the riflescope
- Riflescope firmware version
- Hardware version
- Service information
- Battery information

## **Functions**

# Observation and image modes



The device has two image modes: colour and black and white.

Toggle between modes:

- 1. Turn the aperture adjustment ring (12) to select the observation mode (Day , Night ().
- 2. Select the image mode (color/black-and-white) by short pressing the **ON/OFF (3)** button.

Optimal combinations of modes:

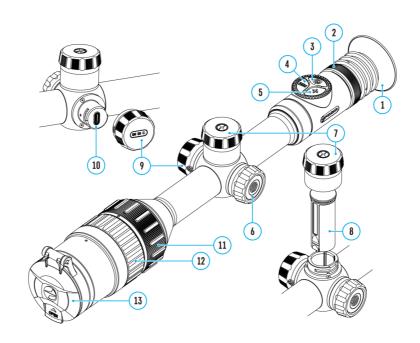
Time of day	Day	Twilight	Night
Observation mode	<del>\</del> -	•	(
Image Mode	Colour		Black and white
IR-illuminator	No		Yes

At dusk, turn the aperture adjustment ring (12) to position . You will be able to use colour mode. When the light lowers, switch to black and white.

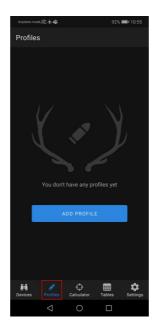
At night, you can also use an IR-illuminator (included in the package or purchased separately).

*Note:* In low light conditions, noise may appear in the image. This is normal and not a defect.

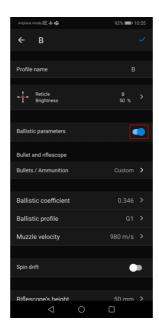
## **Ballistic calculator**



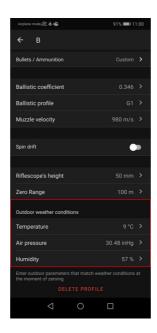
- 1. Install the Stream Vision Ballistics app from Google Play or AppStore.
- 2. Go to Profiles tab.



**3.** Create a profile for your riflescope, ammunition and zeroing distance. Make sure that "Ballistic parameters" switch is on. If your ammo is not on the list, you can enter its parameters manually. The more parameters you specify, the more accurate the recommended point of aiming will be.



**4.** Adjust the temperature, pressure and humidity of the environment while zeroing your riflescope.

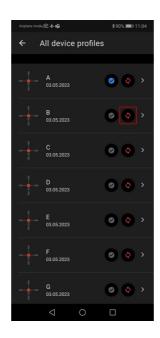


**5.** Enter a profile name and click save



- **6.** Connect your riflescope to your smartphone using Bluetooth. First, make sure that your riflescope has the latest firmware version 3.3 or higher installed.
- 7. Load the profile into the riflescope.

To do this, go to the "Devices" tab  $\rightarrow$  Select your riflescope  $\rightarrow$  "All device profiles"  $\rightarrow$  click on the profile you want to replace and select the created profile from the list.



**8.** Set the status to "Active" for the ballistic profile. To do this, click on the button next to the desired profile, or select it in the profile selection menu in the riflescope.



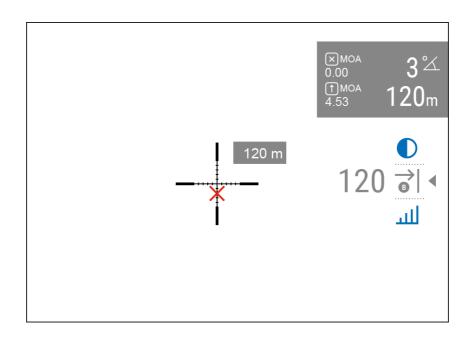


**9.** Make sure that the Ballistic Activation option is enabled in the riflescope's **Ballistics** menu.



- **10.** Select the desired distance in the quick menu:
  - Press the controller button (6) briefly to enter the quick menu.

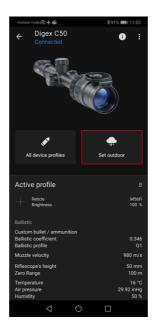
- Briefly press the controller button (6) to select .
- Rotate the controller ring (6) to select the desired distance.
- Press and hold the controller button (6) to exit the menu or wait 10 seconds to exit automatically.



11. Check the accuracy of your profile settings with a test shot at the shooting range.

*Note:* profiles for different types of ammunition must be zeroed separately.

**12.** To activate the use of weather data in your geolocation during the shot, go to the "Devices" tab  $\rightarrow$  Select your riflescope  $\rightarrow$  "Set outdoor".



In the **Ballistics** section of the main menu, you can configure the following settings of the ballistic calculator:

Screen position of the measured distance value

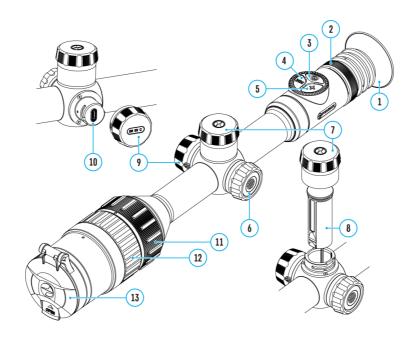
- Turn on/off the ballistic calculator
- Correction units
- Reticle type and color for suggested point of aiming.

### **Stream Vision Ballistics Manual**

Android

iOS

# Video recording and photography



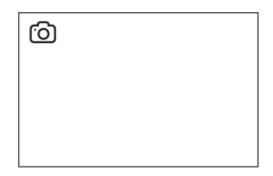
The riflescope is capable of video recording and photography. Videos and images are saved on the built-in memory card.

Before using the photo and video functions, read the **Date** and **Time** subsections of the **General Settings** section.

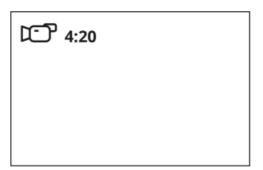
For information on how to watch recorded photos and videos, see the Stream Vision 2 user manual: Android, iOS.

Built-in recorder operates in two modes:

Photo (photography; the icon of the displayed in the upper left corner of the display).



• **Video** (video recording; the icon is displayed in the upper left corner of the display, the total remaining recording time is given taking into account the current resolution in the HH:MM format (hours:minutes).



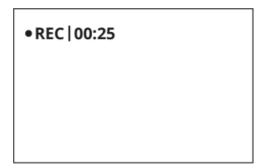
Toggle (switch) between the riflescope operating modes with a long press of the **REC** (4) button. Switching between the modes is cyclical ( $Video \rightarrow Photo \rightarrow Video...$ ).

### Photo mode. Capturing an image

- 1. Switch to the **Photo** mode with a long press of the **REC (4)** button.
- 2. Press the **REC (4)** button briefly to capture a photo. The icon flashes the photo file is being saved to the built-in SD card.

### Video mode. Recording a video

- 1. Switch to the Video mode with a long press of the REC (4) button.
- 2. Press the REC (4) button briefly to start video recording.
- **3.** When the video recording starts, the icon will disappear, instead of it the **REC** icon as well as the video recording timer displayed in the MM:SS (minutes:seconds) format will appear •REC | 100:25.



- 4. Pause/continue recording by briefly pressing the REC (4) button.
- **5.** Press and hold the **REC (4)** button to stop video recording.

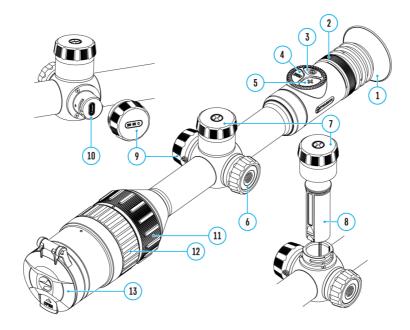
Video files are stored in the built-in memory card:

- After turning off the video recording;
- Upon powering the riflescope off if recording was on;
- When the memory card is overfilled during recording (Memory Full message appears on the display).

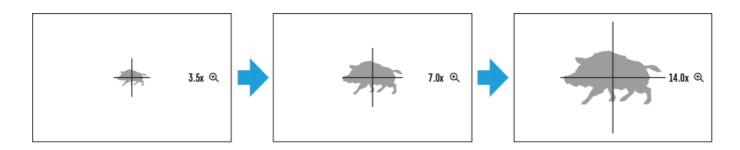
#### Notes:

- You can enter and navigate the menu during video recording.
- Recorded videos and photos are saved to the built-in memory card of the riflescope in the format img\_xxx. jpg (for photos); video\_xxx. mp4 (for video).
- Videos are recorded in clips with a maximum duration of 5 minutes. The number of recorded files is limited by the capacity of unit's internal memory.
- Regularly check free memory within the built-in memory card and move the footage to other storage media to free up the memory card space.
- In case of a memory card error, you can use the format function in the General Settings section of the main menu.
- When the Display Off function is activated, video recording continues to run in the background.

## Discrete digital zoom



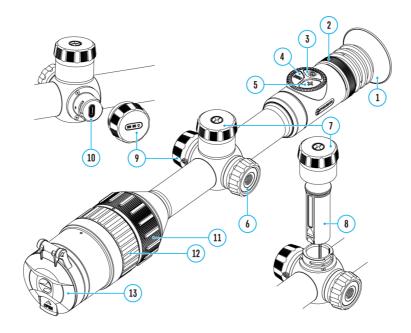
The riflescope functionality allows you to quickly increase the basic magnification (see **Magnification** line in the table of **Technical Specifications**) by 2 and 4 times, as well as to return to the basic magnification.



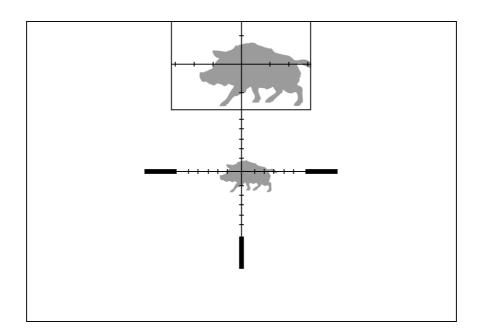
- Press the ZOOM (5) button successively to change the magnification ratio of the riflescope.
- While the icon  $\bigoplus$  is visible on the screen, rotate the controller ring **(6)** for smooth digital zooming from the current magnification.

Note: the magnification value is reset to the base value when the device is switched off.

## PIP function

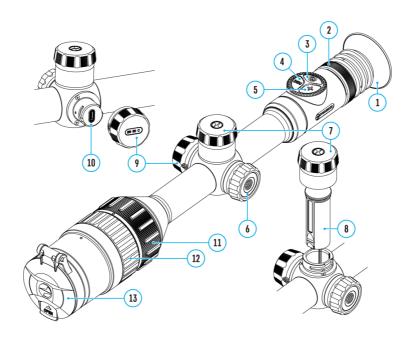


The PiP function (Picture-in-Picture) allows you to see both a magnified image in a particular dialog box and the main image.



- 1. Press and hold the **ZOOM (5)** button to turn on/off the PiP function.
- 2. To change the digital zoom in the PiP window, briefly press the **ZOOM (5)** button or rotate the controller ring **(6)** until the icon is visible on the screen .
- 3. The magnified image is displayed in a particular dialog box, with the full magnification being used.
- 4. The rest of the image is displayed only with the optical zoom (digital zoom is off).
- 5. When PiP is turned off, the display shows the full magnification set for the PiP mode.

# **Display-Off function**

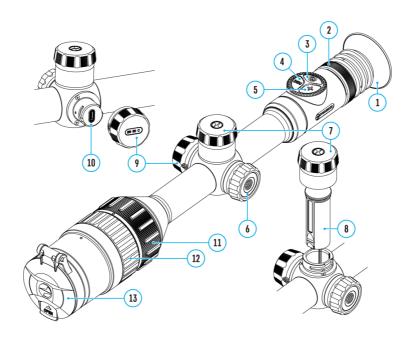


This function darkens the screen, which aids the user's concealment. However, the device stays on.



- 1. When the device is on, press and hold the **ON/OFF (3)** button for less than 3 seconds. The display will turn off, the current time and the "**Display off**" icon will appear.
- 2. Press the **ON/OFF (3)** button briefly to turn on the display.
- 3. When you press and hold the **ON/OFF (3)** button, the display shows the **"Display off"** icon with a countdown. Holding the button down for the duration of the countdown will power the device off completely.

## Wi-fi function



\* Not available for models without Wi-Fi

The riflescope has a function for wireless communication with mobile devices (smartphone or tablet) via Wi-Fi.

- 1. To enable the wireless module, enter the main menu by long pressing the controller button (6).
- 2. Rotate the controller ring (6) to select the Wi-Fi Activation from menu item.
- 3. Press the controller button (6) briefly to turn on/off Wi-Fi module.

#### Wi-Fi is displayed in the status bar as follows:

Indication in the Status Bar	Connection Status
*	Wi-Fi is switched off
.≎≎	Wi-Fi is switched on by the user, Wi-Fi connection in the riflescope is in progress.
<b>4</b> ?	Wi-Fi is switched on, there is no connection to the riflescope



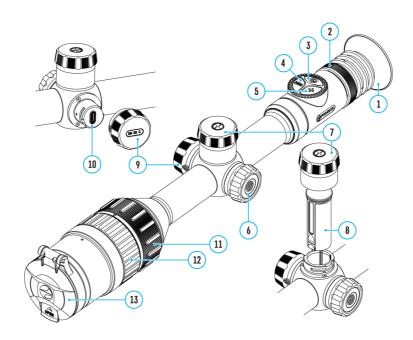
- An external device recognizes the riflescope under the name Digex\_XXXX, where XXXX are the four last digits of the serial number.
- After entering the password on a mobile device (see **Password Setup** subsection of the **Wi-Fi Settings** section for more information on setting a password) and setting up a connection, the icon in the riflescope status bar will change to .
- The Wi-Fi function will turn off automatically if there is not enough battery power for Wi-Fi.

## **Smart reticle function**

Available for scalable reticles X51Fi-300, M56Fi, M57Fi.

When changing the riflescope digital magnification, the reticle that appears on the display is scaled; the reticle appearance will change (enlarge or reduce) proportionally to the magnification. It allows the use of the rangefinder reticles with any digital magnification.

# Scalable reticles



This function is designed to preserve ballistic properties of the scalable reticles X51Fi-300, M56Fi, M57Fi for all magnifications.

- 1. Enter the main menu with a long press of the controller button (6).
- 2. Enter submenu Reticle & zeroing  $\Leftrightarrow$   $\rightarrow$  Reticle Type -! $\equiv$  .
- 3. Select the reticle X51Fi-300, M56Fi, M57Fi.

Please find the available scalable reticles in the catalogue in the **Downloads** section on our **website**).

#### Notes:

- When zooming in and out the image, the selected reticle on the display and in the recorded video changes its geometrical size according to the magnification selected.
- The reticle scale changes both on the main display and in the PiP mode.

## **Wireless Remote Control**

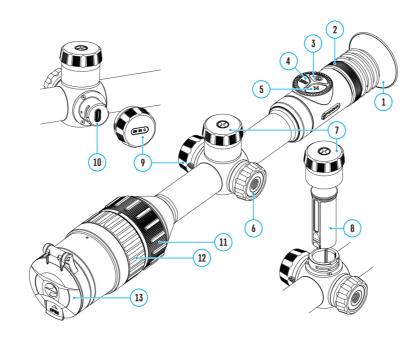
# **Description of controls**

The wireless remote control duplicates the functions of turning off the device, turning off the display, switching colour modes, digital zoom, taking photos, video recording, and it allows navigation through the menu.

	Controller (18)	Button (19)	Button (20)	Button (21)
Short press	Enter the quick menu and submenus of the main menu / confirm the selection / Switch to the next item of the quick menu	Turn the display on / Colour/Black & white mode switch	Control discrete digital zoom	Start video recording / Capture a photo
Long press	Enter/exit the main menu	Turn the	PiP	Switch to

		/ Exit the quick menu	display off / Turn the device off	on/off	photo/video mode
Double press			Disable SPOA of ballistic calculator		
Clockwise rotation	Quick menu	Increase parameter	33		33 34
	Main menu	Navigate downwards/clockwise	32		
Counter-clockwise rotation	Quick menu	Decrease parameter			
	Main menu	Navigate upwards/counterclockwise	31		

# Remote control activation



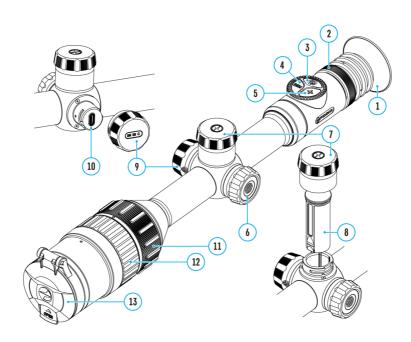
1. Turn on the Bluetooth module (see the **Bluetooth** section).

- 2. In the **Bluetooth** section of the menu, rotate the controller ring **(6)** to select the **Find accessory or device** menu item.
- 3. Confirm your selection with a short press of the controller ring (6) button.
- 4. Press and hold any button on the Remote Control. The Remote Control is visible in the Bluetooth network and can be connected during this time.
- 5. Rotate the controller ring **(6)** to select the remote control from the dropdown list that appears.
- 6. Confirm your selection with a short press of the controller ring (6) button.

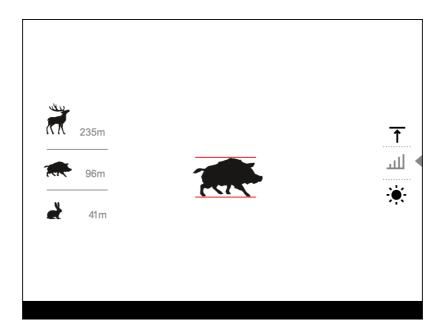
#### Notes:

- Once paired, the Remote Control can operate the Pulsar device.
- Going forward, the Remote Control will automatically connect to the paired device when within visible range.
- The name of the remote control and its battery charge level will appear in the list of paired devices at the bottom of the display in the **Bluetooth** section of the menu.

# Stadiametric rangefinder



The night vision digital riflescope is equipped with a stadiametric rangefinder, allowing you to determine the approximate distance to an object if its size is known.

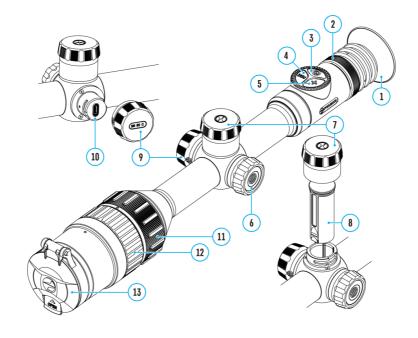


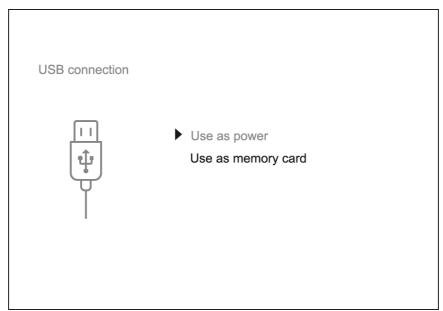
- 1. To select the **Stadiametric Rangefinder** function, enter the **Quick Menu** by briefly pressing the controller button **(6)**.
- 2. Press the controller button (6) briefly to select the icon \_\_\_\_\_\_ .
- 3. The display will show the lines for measurements, the icons and numbers of the measured distance for three objects.
- 4. Place the bottom fixed line under the object.
- 5. Rotate the controller ring **(6)** to move the upper line relative to the lower horizontal fixed line so that the object is located directly between the lines. A target range automatically recalculated along with movement.
- 6. To exit the rangefinder mode, briefly press the controller button **(6)** or wait 10 seconds to exit automatically.

#### Notes:

- There are three predefined values for objects: Hare 0.3 m high, Boar 0.7 m high,
   Deer 1.7 m high.
- The measured range value is rounded off before being displayed for large range values up to 5 m, for shorter range – up to 1 m.
- To select a unit of measurement (meters or yards), go to the General Settings
   menu item ⇒ Units of Measure
   submenu.

## **USB** connection





- 1. Press the **ON/OFF (3)** button briefly to power the riflescope on (the computer will not detect the riflescope if it is turned off).
- 2. Connect one end of the USB cable to the riflescope micro USB Type-C (10) and the other one to the port on your computer using a USB Type-A adapter.
- 3. The riflescope is detected by the computer automatically and no installation of drivers is required.
- 4. After a few seconds, two connection options appear on the display: **Power** and **Memory card**.
- 5. Rotate the controller ring **(6)** to select the connection mode.
- 6. Press the controller button (6) briefly to confirm your selection.

#### **Power**

- Upon choosing this mode, your PC is used as an external power supply. An icon
   100♥ will appear in the status bar.
- The riflescope continues operating and all functions are accessible.
- Battery recharge feasibility depends on your computer's USB port.

#### **Memory Card**

- When selecting this mode, the computer recognizes the riflescope as a memory card.
   This mode is designed to manage the files saved in riflescope's memory.
- Even though the riflescope is on, its functions are unavailable in this mode. It will continue to operate after being disconnected from the computer.
- If a video was being recorded at the moment of connection, the recording will stop and will be saved.

#### **USB Disconnection**

- When the USB is disconnected from the riflescope connected in the **Power** mode, the riflescope continues to operate on battery packs when they are sufficiently charged.
- If the riflescope is in **Memory Card** mode and is disconnected from USB, the device will remain on.

## Software

# **Stream vision 2**



\* Not available for models without Wi-Fi

Install the Stream Vision 2 application to download files, update firmware, control the device by remote control and broadcast images from your device to a smartphone or a tablet via WiFi.

We recommend using the latest version – Stream Vision 2.



You can find further guidelines on Stream Vision 2 here.

**Download** from Google Play

Download from App Store

Find answers to frequently asked questions about using Stream Vision 2 here.

#### Stream Vision 2 Manual

Android

iOS

# Firmware update

- \* Not available for models without Wi-Fi
  - 1. Download the free Stream Vision 2 App in Google Play or App Store.
  - 2. Connect your Pulsar device to your mobile device (smartphone or tablet).
  - 3. Launch Stream Vision 2 and go to section "Settings".
  - 4. Select your Pulsar device and press "Check firmware update".
  - 5. Wait for the update to download and install. Pulsar device will reboot and will be ready to operate.

#### Important:

- if your Pulsar device is connected to a phone or mobile device, please turn on mobile data transfer (GPRS/3G/4G) to download update;
- if your Pulsar device is not connected to your phone or mobile device but is already listed in "Settings" > "My devices" section, you may use Wi-Fi to download update.

Find answers to frequently asked questions about using Stream Vision 2 here.

#### Is your firmware up to date?

Click here to check the latest firmware for your device.

# Maintenance

# **Technical inspection**

It is recommended to inspect your riflescope before each use. Check the following:

- The device should be free of any cracks or deformations.
- The lenses should be free of cracks, grease, dirt or debris.
- The state of rechargeable batteries (should be fully charged). Electrical sockets should be free of salts, oxidation, or other debris.
- All controls should be responsive.

### **Technical maintenance**

Maintenance should be carried out at least twice a year and should include the following steps:

- Wipe the exterior surfaces of metal and plastic parts with a cotton cloth. Do not use chemically active substances, solvents, etc. as these will damage the paint.
- Clean the electrical contacts of the battery and battery slot on the riflescope and IR illuminator using a non-greasy organic solvent.
- Check the lenses of the eyepiece, objective and IR illuminator. If necessary, remove
  dust and sand from the optics (it is preferable to use a non-contact method). Cleaning
  of the exterior surfaces of the optics should be done with cleaners designed
  especially for this purpose.

# **Troubleshooting**

For technical support please contact **support@pulsar-vision.com**.

Answers to frequently asked questions about the devices can also be found in the FAQ section.

# The riflescope will not turn on

#### Possible cause

The Battery Pack is empty.

#### **Solution**

Charge the Battery Pack.

## **Device malfunction**

#### Solution

In case of any malfunctions during operation, try resetting the device by long pressing the ON/OFF button for 10 seconds.

# The riflescope will not operate on external power supply

#### Possible cause

USB cable is damaged.

#### Solution

Replace USB cable.

#### Possible cause

The external power supply is discharged.

#### Solution

Charge the external power supply.

# The reticle is blurred and cannot be focused with the dioptre ring

#### Possible cause

The dioptre adjustment range is not enough for your eyesight.

#### Solution

If you wear glasses with a range of -3/+5, keep glasses on when looking through the eyepiece.

#### Possible cause

Condensation on the external surface of the eyepiece lens.

#### Solution

Wipe the lens with a cloth.

# Coloured lines appeared on display or image has disappeared

#### Possible cause

The device was exposed to static electricity during operation.

#### Solution

After exposure to static electricity, the device may either reboot automatically, or require turning off and on again.

# The image is too dark

#### Possible cause

Brightness or contrast level is too low.

#### Solution

Adjust the brightness or contrast in the Quick Menu.

#### Possible cause

The aperture is closed during night observation.

#### Solution

Open the aperture by turning the control ring to the position



# With a crisp image of the reticle, the image of the observed target that is at least 30 m away is blurred

#### Possible cause

Dust and condensate are covering the outside or inside optical surfaces.

#### Solution

Wipe the outer surface of the objective lens with a soft cotton cloth. Dry the riflescope. Let it stand for four hours in a warm room.

#### Possible cause

The lens is not focused.

#### Solution

Adjust the image sharpness by rotating the lens focus ring.

# The point of impact shifts after firing rounds

#### Possible cause

The riflescope is not mounted securely or the mount was not fixed with thread sealant.

#### Solution

Check that the riflescope has been securely mounted.

Make sure you are shooting the same cartridge and load as when the weapon was first zeroed.

Be advised that changes in season, time of day and/or changes in temperature may slightly shift your point of impact. Double checking your zero before hunting is recommended.

# After zeroing, the aiming reticle moves relative to the centre of the display

#### Possible cause

After shooting, the aiming reticle may not be in the centre of the display. This is normal and is not a defect.

# The riflescope will not focus

#### Possible cause

Wrong settings.

#### Solution

Adjust the riflescope according to the **Powering on and Image Setting** section. Check the outer surfaces of the objective lenses and eyepiece and, where necessary, wipe them from dust, condensation, frost, etc. In cold weather, you can use special anti-fogging coatings (e.g., the same as for corrective glasses).

# Smartphone or tablet cannot be connected to the riflescope

#### Possible cause

Password in the riflescope was changed.

#### Solution

Delete network and connect again inserting the password saved in the riflescope.

#### Possible cause

There are too many Wi-Fi networks in the area where the riflescope is located which may cause signal interference.

#### Solution

To ensure stable Wi-Fi performance, move the riflescope to an area with few or no Wi-Fi networks.

#### Possible cause

The device has a 5 GHz network enabled, but the smartphone only supports 2.4 GHz.

#### Solution

**Switch** the device's Wi-Fi bandwidth to 2.4 GHz.

More information on solving problems with connection to Stream Vision 2 by following the **link**.

# Wi-Fi signal is missing or interrupted

#### Possible cause

Smartphone or tablet is out of range of a strong Wi-Fi signal. There are obstacles between the device and the smartphone or tablet (e.g., concrete walls).

#### Solution

Relocate smartphone or tablet into the Wi-Fi signal line of sight.

More information on solving problems with connection to Stream Vision 2 by following the **link**.

# Poor image quality/ Reduced detection distance

#### Possible cause

These problems may occur during the observation in adverse weather conditions (snow, rain, fog etc.).

# There are several light or black dots (pixels) on riflescope's display or sensor

#### Solution

Presence of dots is caused by peculiarities of sensor or display production technology and is not a defect.

## Remote control does not work

#### Possible cause

The Bluetooth module is not turned on.

#### Solution

Turn on the Bluetooth module according to the instructions (see the **Bluetooth** section).

#### Possible cause

The Remote control is not activated.

#### Solution

Activate the remote control according to instructions (see the **Remote Control Activation** section).

#### Possible cause

The Remote Control is out of range of the device.

#### Solution

Return to the device coverage area.

#### Possible cause

Remote control battery low.

#### Solution

Install a new CR2032 battery as follows: unscrew the screws on the rear cover of the Remote Control, remove the cover, install a new battery, and screw the cover with screws.

# Legal compliances and disclaimers

Attention! Digex digital riflescopes require a license when exported outside your country.

**Electromagnetic compatibility.** This product complies with the requirements of European standard EN 55032: 2015, Class A.

**Caution:** Operating this product in a residential area may cause radio interference.

**Updates of the Product.** The manufacturer reserves the right at any time, without mandatory prior notice to the Customer, to make changes to the package contents (subject to the applicable laws, if any), design and characteristics that do not impair the quality of the Product.

**Repair**. Repair of the product is available within 5 years after purchase of the product.

Limitation of Liability. Subject to mandatory applicable laws and regulations: manufacturer will not be liable for any claims, actions, suits, proceedings, costs, expenses, damages or liabilities (if any), arising out of the use of this product. Operation and use of the product are the sole responsibility of the Customer. Manufacturer's sole undertaking is limited to providing the product(s) and related services in accordance with the terms and conditions of concluded transactions, including provisions established in warranty. The provision of products sold and services performed by Manufacturer to the Customer shall not be interpreted, construed, or regarded, either expressly or implied, as being for the benefit of or creating any obligation toward any third party (other than Distributor, Dealer, Buyer). Manufacturer's liability hereunder for damages, regardless of the form or action, shall not exceed the fees or other charges paid to Manufacturer for the product(s) and/or service(s).

MANUFACTURER WILL NOT BE LIABLE FOR LOST REVENUES OR INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY, OR PUNITIVE DAMAGES, EVEN IF THE MANUFACTURER KNEW OR SHOULD HAVE KNOWN THAT SUCH DAMAGES WERE POSSIBLE AND EVEN IF DIRECT DAMAGES DO NOT SATISFY A REMEDY.

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